

Claims

1. A film comprising at least one O₂ gas barrier layer substantially consisting of a mixture of an ethylene/vinyl alcohol copolymer (EVOH) and at least one multipolyamide, wherein the multipolyamide is made up of the 3 components

- 5 I) hexamethylenediamine/adipic acid (polyamide 6,6),
10 II) hexamethylenediamine/azelaic acid (polyamide 6,9)
 and/or hexamethylenediamine/sebacic acid
 (polyamide 6,10) and
15 III) hexamethylenediamine/isophthalic acid (polyamide
 6,I) and/or hexamethylenediamine/terephthalic
 acid (polyamide 6,T).

2. A film according to claim 1, characterised in that the multipolyamide is made up of

- 20 a) 15-75 mol% of component I,
 b) 15-65 mol% of component II and
 c) 10-70 mol% of component III,

25 wherein the total quantity of components I-III must always add up to 100 mol%.

3. A film according to claim 1, characterised in that the multipolyamide is made up of

- 30 a) 15-60 mol% of component I,
 b) 15-55 mol% of component II and
 c) 10-45 mol% of component III,

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wherein the total quantity of components I-III must always add up to 100 mol%.

4. A film according to claim 1, characterised in that the
5 multipolyamide is made up of

- a) 35-55 mol% of component I,
- b) 15-55 mol% of component II and
- c) 10-30 mol% of component III,

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wherein the total quantity of components I-III must always add up to 100 mol%.

5. A film according to any one of claims 1 to 4,
15 characterised in that the ethylene/vinyl alcohol copolymer consists of 20-50 mol% ethylene, preferably 42-48 mol% ethylene, particularly preferably 38-48 mol% ethylene.

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6. A film according to any one of claims 1 to 5,
characterised in that the O₂ gas barrier layer consists of a mixture of 10-45 wt.% EVOH and 55-90 wt.% multipolyamide, in each case relative to the total quantity of the mixture.

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7. A film according to claim 6, characterised in that the O₂ gas barrier layer consists of a mixture of 20-40 wt.% EVOH and 60-80 wt.% multipolyamide, in each case relative to the total quantity of the mixture.

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8. A film according to any one of claims 1 to 7,
containing at least one outer layer, preferably two

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outer or surface layers, at least one of which layers is heat-sealable.

9. A film according to claim 8, characterised in that a
5 mixture of ethylene/vinyl acetate copolymer (EVA) and LLDPE (linear low density polyethylene) is used as the outer layer material.

10. A film according to claim 9, characterised in that a mixture of 40-65 wt.% of an ethylene/vinyl acetate copolymer and 35-60 wt.% of LLDPE, wherein the total quantity of the polymer components must always add up to 100 wt.%, is used as the heat-sealing layer material.

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11. A multilayer film according to any one of claims 1 to 10, characterised in that it is made up of the O₂ gas barrier layer and 2 outer layers.

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12. A film according to claim 11, characterised in that the layers are in each case joined together by a coupling agent layer.

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13. A film according to claim 12, characterised in that the coupling agent layers are based on a mixture of maleic anhydride-grafted ethylene/vinyl acetate copolymer and LLDPE.

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14. A film according to claim 12 or 13, characterised in that at least one coupling agent layer is coloured.

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15. A film according to any one of claims 1-14,
characterised in that the film is monoaxially,
preferably biaxially, drawn.

5 16. A film according to any one of claims 1-15,
characterised in that the film comprises at least one
crosslinked layer.

10 17. A film according to any one of claims 1-16,
characterised in that the film is shrinkable.

18. Use of a film according to any one of claims 1 to 17
for packaging perishable, gas-releasing products,
preferably foodstuffs.

15 19. Use according to claim 19 for packaging cheese,
preferably cheese which is still ripening.

20 20. Use according to claim 19 or claim 20 for packaging
semi-hard and/or hard cheese.

25 21. Packaging for perishable, gas-releasing products,
preferably foodstuffs, made from a film according to
any one of claims 1 to 17.

22. Packaging for cheese made from a film according to any
one of claims 1 to 17.

30 23. A cheese ripening pouch made from a film according to
any one of claims 1 to 17.